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PATENTS

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE  
BOARD OF PATENT APPEALS AND INTERFERENCES**

IN RE:

APPLICANT; WILLIAM M. HAMMESFAHR

S.N.: 09/841,546

GROUP ART UNIT: 3768

FILED: 04/23/2001

EXAMINER: FRANCIS JAWORSKI

FOR: A TITRATION SYSTEM FOR TREATING  
CEREBRAL VASOSPASMS

ATTY DOC NO. 2087.1

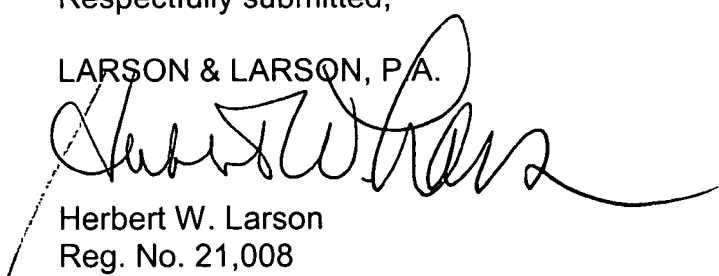
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**APPLICANT'S BRIEF ON APPEAL**

The enclosed three copies of the brief with Appendix are substitutes for the previously filed brief. A substitute brief was requested in the Office Action dated May 21, 2007.

Respectfully submitted,

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**APPLICANT'S BRIEF ON APPEAL**

I. Real Party in Interest is:

Dr. William M. Hammesfahr  
Hammesfahr Neurological Institute  
600 Druid Road East  
Clearwater, FL 33736

II. Related Appeals and Interferences

There are no related appeals or interferences.

III. STATUS OF CLAIMS

There are seven (7) pending claims in the subject application numbered 38-44 under final rejection. Claims 1-37 were cancelled during prosecution. All seven (7) pending claims numbered 38-44 are the subject of the appeal herein.

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In the final office action dated October 31, 2006, the Examiner sets forth two grounds for rejection.

First, the Examiner rejects Claims 38-44 under 35 U.S.C. § 112 as being indefinite.

Secondly, the Examiner rejects Claims 38-44 under 35 U.S.C. § 103(a) as being unpatentable over Shaw et al. (U.S. Patent 4,650,484) in view of Stanley et al. (U.S. Patent 4,885,173), Fung et al. (U.S. Patent 5,278,192) and Ragauskas et al. (U.S. 5,388,583).

#### IV. STATUS OF AMENDMENTS

There were no amendments filed after the final rejection dated October 31, 2006.

#### V. SUMMARY OF CLAIMED SUBJECT MATTER

The invention of Claim 38 is a titration system for treating a disease caused by insufficient cerebral perfusion. The system employs a flow measuring device to test for cerebral vasospasms (page 4, lines 17-19), a dosage device that administers a vasospasm reducing dosage of a particular medicine with the dosage device being adjustable over time to titrate the dosage either upwards or downwards or substitute another medicine to minimize severity of the vasospasm (page 7, lines 26-31).

The invention of Claim 39, incorporating all of the limitations of Claim 38, identifies the flow measuring device comprising transcranial Doppler measuring means (page 3, lines 2-4 and Fig. 1).

The invention of Claim 40, incorporating all of the limitations of Claim 38,

adding the feature that the dosage device comprises a means for delivering a vasodilator selected from the group comprising Nitroglycerin in pill, patch, ointment, cream, inhaler, spray and other forms (page 3, lines 28-95; page 5, lines 2-4). The Nitroglycerin equivalents and substitutes, comprising p.o. clonidine, isradipine, hydrazine, nifedipine and/or other medicines (page 5, lines 5-6) selected from the empirical group of medications which have the common characteristics of causing smooth muscle relaxation and/or which systematically reduce pulmonary capillary wedge pressure and combinations of the foregoing (page 7, lines 11-15).

The invention of Claim 41, incorporating all of the limitations of Claim 38, adding the feature of a low measuring device comprising transcranial Doppler measuring means (page 3, lines 2-4) and the dosage device comprises transdermal, inhaler, spray and other forms of vasodilators selected from the group consisting of Nitroglycerine equivalents and substitutes, p.o. clonidine, isradipine, hydrazine, nifedipine and/or other medicines selected from the empirical group of medications which have the common characteristics of causing smooth muscle relaxation and which systematically reduce pulmonary capillary wedge pressure and combinations of the foregoing (page 5, lines 5-6 and page 7, lines 11-15).

The invention of Claim 42, incorporating all of the limitations of Claim 41, adding the feature that the delivery device comprises means for delivering a vasodilator selected from the group comprising Nitroglycerin in pill, patch, ointment or cream form (page 5, lines 2-4).

The invention of Claim 43, incorporating all of the limitations of Claim 46 [sic 41] adds the feature that the delivery system is adapted for transdermal delivery

(page 8, line 24).

The invention of Claim 44, incorporating all of the limitations of Claim 38, adds the feature that the delivery system is adapted for the adjustment of the dosage device over time within the range of about 0.02 to 20 milligrams per day (Nitroglycerin equivalent) of vasodilator (page 7, lines 21-23).

#### VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

(1) Whether Claims 38-44 are indefinite within the meaning of 35 U.S.C. § 112, second paragraph.

(2) Whether Claims 38-44 are obvious within the meaning of 35 U.S.C. § 103(a) over Shaw et al. (U.S. Patent 4,650,484) in view of Stanley et al. (U.S. Patent 4,885,173, Fung et al. (U.S. Patent 5,278,192 and Ragauskas et al. (U.S. Patent 5,388,583).

Since Claims 39-44 are dependent from independent Claim 38; if Claim 38 is allowable then all seven Claims 38-44 are allowable. Since Claims 42 and 43 are dependent on Claim 41; if Claim 41 is allowable, then all three Claims 41-43 are allowable.

As stated above, Claim 38 is independent and Claim 39 is dependent on Claim 1. However, Claim 39 stands alone and would be patentable, as discussed in Arguments set forth below, even if Claim 38 is found unpatentable. Claim 40 is dependent on Claim 38. However, Claim 40 also stands alone and would be patentable, as discussed in the Arguments set forth below, even if Claim 38 is found unpatentable. Claim 41 is dependent on Claim 38. However, Claim 41 stands alone and would be patentable, as discussed in the Arguments set forth below, even if

Claim 38 is found unpatentable. Claim 42 is dependent on Claim 41. However, Claim 42 also stands alone and would be patentable, as discussed in Arguments set forth below, even if Claim 41 is found unpatentable. Claim 43 is dependent on Claim 41. However, Claim 43 stands alone and would be patentable, as discussed in the Arguments set forth below, even if Claim 41 is found unpatentable. Claim 44 is dependent on Claim 38. However, Claim 44 also stands alone and would be patentable, as discussed in the Arguments set forth below, even if Claim 38 is found unpatentable.

## VII. ARGUMENT

(i) Claims 38-44 are definite within the meaning of 35 U.S.C. § 112, second paragraph.

The Examiner has rejected Claims 38-44 under 35 U.S.C. § 112, second paragraph, as being indefinite. All of Claims 38-44 are directed to a titration system for diagnosing and treating a disease. One element in the system is a flow measuring device to test for cerebral vasospasms. A second is a dosage device which administers a vasospasm reducing dosage. The dosage device is adjustable over time to titrate the dosage in response to testing to increase, decrease or substitute another medicine. The Examiner is correct that a decision has to be made by a practitioner as whether to increase, decrease or substitute another medicine. The fact is that the system provides for the capability for the practitioner to make that decision. Applicant is not claiming the input of a specific practitioner, but is claiming a system which is adapted to receive such input. As such it is not believed that Claims 38-44 are indefinite.

(ii) Claims 38-44 are not obvious in view of the cited prior art

The Examiner further rejected Claims 38-44 under 35 U.S.C. § 103. This rejection includes four references Shaw et al., Stanley et al., Fung et al. and Ragauskas et al. Shaw et al. describes a method for treating ischemic conditions by administering a vasodilator to a patient continuously without intermediate testing at a rate of from 10 micrograms to 400 micrograms per hour. There is no suggestion that the dosage is adjusted over time to titrate the dosage to minimize severity of a vasospasm.

Stanley et al. describes a sustained lollipop delivery vehicle for cardiovascular or renal vascular activities. Stanley et al. is not directed to cerebral vasospasms and does not suggest that the dosage can be adjustable over time in response to titration testing.

Fung et al. is directed to a treatment for congestive heart failure and is not concerned with cerebral vasospasms. Furthermore, Fung et al. only increases dosages until angina is effectively controlled. There is no suggestion that dosages are adjusted to minimize occurrence and severity of a vasospasm.

Ragauskas et al. suggests the possibility of evaluating cerebral vasospasm using ultrasonic pulses within the intracranial medium.

Taking Shaw et al, Stanley et al., Fung et al. and Ragauskas et al. together and considering them as a whole, they describe treating ischemic conditions by administering a vasodilator over sustained periods of time with increasing dosage and evaluating cerebral vasospasms with ultrasonic pulses. In contrast, applicant's invention of independent Claim 38 is directed to a titration system for treating a

disease caused by insufficient cerebral perfusion; the system employing: (1) a flow measuring device to test for cerebral vasospasms, (2) a dosage device which administers a vasospasm reducing dosage of a particular medicine and (3) the dosage device being adjustable over time to titrate the dosage either upwards or downwards or substitute another medicine to minimize severity of the vasospasm. Applicant's treatment relies on the adjustable dosage based on titration of the dosage and changes made as necessary. The prior art in combination does not describe such an invention.

In addition, it is noted that the Examiner has picked and chosen portions of four references in order to attempt to support an argument that applicant's Claim 38 is obvious. In fact the four references as a whole do not teach applicant's titration system. Nevertheless, the Court of Appeals for the Federal Circuit has stated, "it is impossible to use the claimed invention as an instruction manual or template to piece together the teaching of the prior art so that the claimed invention is rendered obvious. This Court has previously stated that one cannot use hindsight reconstruction to pick and choose among isolated disclosures in a prior art to deprecate the claimed invention." See *In re Fritch* 23 USPQ 2<sup>nd</sup> 1780, 1784 (Fed. Cir. 1992). See also, *Ruiz v A.B. Chance Co.* 69 USPQ 2<sup>nd</sup> 1686 (Fed. Cir. 2004).

Of the references cited, only Shaw et al. and Ragauskas et al. even relate to vasospasms. These references together do not teach applicant's invention of Claim 38. The other references are not even concerned with cerebral vasospasms and should not be used in an obviousness rejection.

Taking all four references cited together as a whole and considering them as



a whole they do not teach applicant's invention of Claim 38 and do not make such claim obvious within the meaning of U.S.C. § 103(a). Therefore, the rejection of Claim 38 should be overruled.

With respect to Claim 39, the four references as a whole do not teach a titration system as set forth in Claim 38 wherein the flow measuring device is a transcranial Doppler measuring means.

With respect to Claim 40, the four references as a whole do not teach a titration system as set forth in Claim 38 wherein the dosage device is a means for delivering a vasodilator selected from the group of a nitroglycerin in pill, patch, ointment, cream, inhaler and spray form, clonidine, isradipine, hydrazine, nifedipine.

With respect to Claim 41, the four references as a whole do not teach a titration system as set forth in Claim 38 wherein the flow measuring device is a transcranial Doppler measuring means and the dosage device is a transdermal, inhaler, spray form of vasodilator selected from the group consisting nitroglycerin, clonidine, isradipine, hydrazine and nifedipine.

With respect to Claim 42, the four references as a whole do not teach a titration system as set forth in Claim 41 wherein the delivery device is a means for delivering a nitroglycerin vasodilator in pill, patch, ointment or cream form.

With respect to Claim 43, the four references as a whole do not teach a titration system as set forth in Claim 41 wherein the delivery system is adapted for transdermal delivery.

With respect to Claim 44, the four references as a whole do not teach a titration system as set forth in Claim 38 wherein the delivery system adjusts the

dosage device within the range of 0.02 to 20 milligrams per day of a vasodilator.

If follows that the rejection of Claims 39-44, like Claim 38, should be overruled.

CONCLUSION

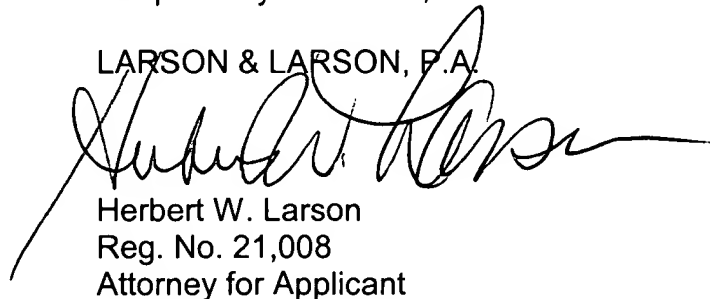
(1) The claims are definite for the purpose to which they are presented and therefore the rejection under 35 U.S.C. § 112 should be reversed.

(2) The rejection of Claims 38-44 should be reversed because the four references taken as a whole fail to make the claims obvious within the meaning of 35 U.S.C. § 103(a).

Kindly deduct the \$250.00 Appeal Fee from Deposit Account No. 12-0551 in the name of Larson & Larson, P.A.

Respectfully submitted,

LARSON & LARSON, P.A.

A handwritten signature in black ink, appearing to read 'Herbert W. Larson', is written over the printed name and title.

Herbert W. Larson  
Reg. No. 21,008  
Attorney for Applicant

HWL/ml

## VIII. CLAIMS APPENDIX

38. A titration system for diagnosing and treating a disease caused at least partially by insufficient cerebral perfusion, comprising in combination:  
a flow measuring device to test for cerebral vasospasm, a dosage device which administers a vasospasm-reducing dosage of a medicine selected from the empirical group of medications which have the common characteristic of causing smooth muscle relaxation and/or which reduce pulmonary capillary wedge pressure, and said dosage device being adjustable over time to titrate said dosage in response to said testing to increase, decrease or substitute another medicine to minimize occurrence and severity of said vasospasm.
39. A system according to Claim 38 wherein the flow measuring device comprises transcranial Doppler measuring means.
40. A system according to Claim 38 wherein the dosage device comprises means for delivering a vasodilator selected from the group comprising Nitroglycerin in pill, patch, ointment, cream, inhaler, spray and other forms, Nitroglycerin equivalents and substitutes, comprising p.o. clonidine, isradipine, hydrazine, nifedipine, and/or other medicines selected from the empirical group of medications which have the common characteristic of causing smooth muscle relaxation and/or which systemically reduce pulmonary capillary wedge pressure, and combinations of the foregoing.
41. A system according to Claim 38 wherein the flow measuring device comprises transcranial Doppler measuring means and the dosage device comprises transdermal, inhaler, spray and other forms of vasodilator selected from the group consisting of Nitroglycerin, Nitroglycerin equivalents and substitutes, p.o. clonidine,

isradipine, hydrazine, nifedipine, and/or medicines selected from the empirical group of medications which have the common characteristic of causing smooth muscle relaxation and/or which systemically reduce pulmonary capillary wedge pressure, and combinations of the foregoing.

42. A system according to Claim 41 wherein the delivery device comprises means for delivering a vasodilator selected from the group comprising Nitroglycerin in pill, patch, ointment or cream form.

43. A system according to Claim 46 wherein the delivery system is adapted for transdermal delivery.

44. A system according to Claim 38 wherein the delivery system is adapted for the adjusting of the dosage device over time within the range of about 0.02 to 20 milligrams per day (Nitroglycerin equivalent) of vasodilator.

IX. EVIDENCE APPENDIX

<u>Patent</u>	<u>Page</u>
Shaw et al., U.S. Patent 4,650,484	5, 6
Stanley et al., U.S. Patent 4,885,173	5, 6
Fung et al., U.S. Patent 5,278,192	5, 6
Ragauskas et al., U.S. Patent 5,388,583	6
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Ruiz v A.B. Chance Co. 69 USPQ 2 <sup>nd</sup> 1686 (Fed. Cir. 2004)	7

X. RELATED PROCEEDINGS APPENDIX

There are no related decisions rendered by a Court or the Board to the Claims at issue in this proceeding.

## Court of Appeals, Federal Circuit

In re Fritch

No. 91-1318

Decided August 11, 1992

DICIAL PRACTICE AND  
OCEDUREProcedure — Judicial review — Standard  
of review — Patents (§410.4607.09)

Obviousness determination is based on underlying factual inquiries concerning invention and prior art, which are reviewed for clear error on appeal, but ultimate conclusion of obviousness is reviewed matter of law.

## TENTS

Patent construction — Claims — Broad  
or narrow (§125.1303)

Prior art patent for grass edging and tending device cannot be held to teach that device is flexible and conformable to ground its entirety, since base portion of device includes prominent anchoring leg which would inhibit longitudinal flexibility, and patent's express teaching that trench is necessary to install device in harder ground shows that it is not freely conformable retro.

Patentability/Validity — Obviousness —  
Relevant prior art — Particular inven-  
tions (§115.0903.03)Patentability/Validity — Obviousness —  
Combining references (§115.0905)

Claims for landscape edging device are prima facie obvious in view of combined teachings of two prior patents, since primary reference does not suggest overall flexibility of landscape retention function of claimed device, and since secondary reference does merely by virtue of flexibility of device described therein, suggest extensive modifications which would bring primary reference into conformity with application claims.

Patentability/Validity — Obviousness —  
Combining references (§115.0905)

Mere fact that prior art may be modified to reflect features of claimed invention does not make modification, and hence claimed invention, obvious unless desirability of such modification is suggested by prior art; claimed invention cannot be used as instructional manual or "template" to piece together teachings of prior art so that claimed invention is rendered obvious.

Appeal from the U.S. Patent and Trademark Office; Board of Patent Appeals and Interferences.

Patent application of John R. Fritch (serial no. 06/838,721, landscape apparatus and method). From decision upholding rejection of application claims 1-7, 9-24, 29 and 30, applicant appeals. Reversed.

Charles L. Gholz, of Obolon, Spivak, McClelland, Maier & Neustadt, Arlington, Va. (John R. Fritch, Corpus Christi, Texas, on brief), for appellant.

Jameson Lee, associate solicitor (Fred E. McKelvey, solicitor, with him on brief; Richard E. Schafer, of counsel), for appellee.

Before Smith, senior circuit judge, and Plager and Rader, circuit judges.

Smith, J.

John R. Fritch (Fritch) appeals the February 1991 decision of the Patent and Trademark Office Board of Patent Appeals and Interferences (Board) affirming-in-part the Examiner's final rejection of the remaining claims in Fritch's application, entitled Landscape Edging Apparatus and Method. The Examiner concluded that Fritch's invention would have been obvious to one of ordinary skill in the art and was therefore unpatentable under 35 U.S.C. § 103. The Board, except for allowing claim 28, agreed. The Board's decision is reversed.

## Issue

The issue is whether the Board erred in affirming the Examiner's determination that the prior art references of Wilson and Hendrix rendered the subject matter of Fritch's independent claims 1, 13, 24, and 29 obvious to one of ordinary skill in the art.

## Background

In his final rejection, the Examiner rejected claims 1-24 and 27-30 of Fritch's application as unpatentable for obviousness under 35 U.S.C. § 103. Fritch appealed the final rejection to the Board. The Board affirmed the rejection as to claims 1-24, 29, and 30, entered a new ground of rejection for claim 27, and reversed as to claim 28. The Board agreed with the Examiner that the teachings of the Wilson and Hendrix patents rendered

the subject matter of independent claims 1, 13, 24, and 29 obvious to one of ordinary skill in the art. Fritch does not appeal the Board's disposition as to claims 27 and 28, and at oral argument withdrew the appeal as to claim 8. The claims remaining in this appeal are 1-7, 9-24, 29 and 30.

## The Fritch Invention

The invention claimed by Fritch involves a landscape edging device which includes a planar base portion and an upwardly extending retainer portion. The base portion is elongate, thin, flexible and has a planar bottom surface conformable to a varying slope ground surface. One longitudinal edge of the base portion serves as a mowing strip and the other serves as a retaining flange for landscape fill. The upwardly extending retainer portion is integrally connected (e.g., fused) to the base portion and defines a longitudinally extending enclosed space. The Fritch invention is intended to be used as a retainer for landscape fill in order to separate unmowable landscape fill from the mowable lawn. It may also be used to secure a landscaping sheet to the ground, or to function as guards at the base of a fence. Independent claims 1 and 13 on appeal are representative of the subject matter claimed:

1. A landscape edging strip formed in its entirety of a thin gauge, flexible material and conformable to a ground surface of varying slope, comprising a continuous elongate, thin gauge, flexible base portion having a planar bottom surface conformable to said varying slope ground surface; a thin gauge, elongate retainer portion integral with said base portion and extending upwardly therefrom and transversely thereover to overlie a portion of said base portion; all of said retainer portion, defining a longitudinally extending enclosed space; said retainer portion being integrally connected to said base portion adjacent one longitudinal edge of said base portion to define a mowing strip adjacent the other longitudinal edge of said base portion.

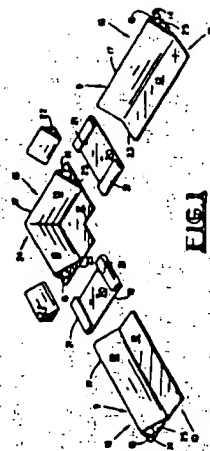
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13. A landscape edging strip formed in its entirety from thin gauge, flexible material and conformable to a ground surface of varying slope, comprising a continuous elongate, thin gauge, flexible base portion having a planar bottom surface conformable to said varying slope ground surface.

integral with said base portion and extending upwardly therefrom and transversely thereover to overlie a portion of said base portion; all of said retainer portion defining a longitudinally extending enclosed space; said retainer portion being integrally connected to said base portion at a transverse location between the longitudinal edges of said base portion, thereby defining a longitudinally extending retaining flange on one side of said retainer portion and a mowing strip on the other side of said retainer portion.

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The critical language in Fritch's independent claims is that the device is to be, in its entirety, both flexible and "conformable to a ground surface of varying slope." These limitations, although located in the claims' preambles, are necessary to give meaning to the claim[s] and properly define the invention. Figure 1 from Fritch's drawings is reproduced below:

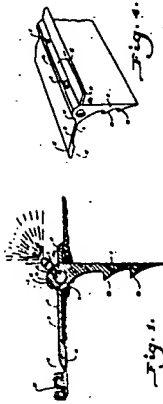


The Prior Art  
a. The Wilson Patent

The Wilson patent relied upon by the Examiner and the Board is entitled "Grass Edging and Watering Device". The embodiment of the Wilson device includes a substantially flat mowing strip extending horizontally from a longitudinally extending body portion. Opposite the mowing strip is a scored flange which may be broken off when not needed or wanted. Between the mowing strip and the flange, and extending vertically from the body portion is an anchoring leg. Located above the anchoring leg is the body portion which contains a water conduit and sprinkler head assembly. The device is intended to be used adjacent to the borders of walks and plant beds. Figures 1 and 4 from Wilson's drawings are reproduced below:

## Standard of Review

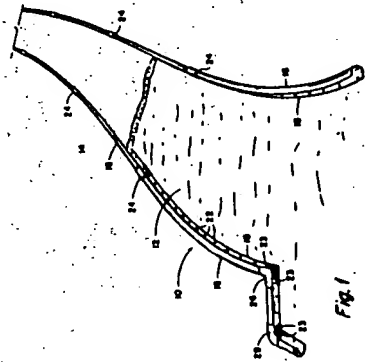
[1] "[O]bviousness is a question of law to be determined from the facts."<sup>1</sup> The obviousness determination "is based upon underlying factual inquiries concerning the claimed invention and the prior art" which are reviewed for clear error.<sup>2</sup> However, it is the ultimate conclusion of obviousness which the Federal Circuit reviews as a matter of law.<sup>3</sup>



## b. The Hendrix Patent

The Hendrix patent is entitled "Loose Material Retainer Strip".<sup>4</sup> The Solicitor chose not to discuss the Hendrix reference in his brief, stating that the Board had deemed Hendrix unnecessary to its decision. The Solicitor overstates the Board's position. The Board based its decision upon "a collective evaluation of the Wilson and Hendrix patents." We include Hendrix in our discussion because it did play a role in the rejection of Fritch's independent claims.

The Hendrix device is composed of elongated, flexible strips having substantially C-shaped cross-section. The bottom lip of the device is to be wider than the top lip in order to facilitate fastening the device to the ground. The device will fit most gentle contours, and the top lip will yield laterally to build-up of gravel until the gravel can be redistributed. The concave portion of the strip is installed such that it faces the material to be retained in place. Hendrix contemplates that the retainer will be used in retaining gravel in driveways, lining flower beds, or on the shoulders of asphalt or concrete highways. Figure 1 of Hendrix's drawings is reproduced below:



## Teachings of Wilson

Fritch takes exception to the Examiner's findings of fact related to the teachings of the Wilson patent. The Examiner's rejection and the Board's opinion rely heavily on the use of Wilson in view of other references to declare the Fritch invention obvious. The Board states that it agrees with the Examiner's finding of fact regarding the teachings of Wilson. In the Examiner's answer, which the Board quotes, the Wilson device is described as follows:

Wilson discloses a landscaping edging strip comprising a relatively thin gauge, elongated flexible base portion including a mower strip B having a planar bottom surface conformable to a varying slope surface.

The Board states that the Wilson reference presents "substantial evidence that Wilson is both thin and flexible." The Board regards the Wilson device as teaching that it is flexible and conformable in its entirety. This finding demonstrates clear error.

[2] It is well settled that a prior art reference is relevant for all that it teaches to those of ordinary skill in the art.<sup>5</sup> The base portion of Wilson is not planar in its entirety, as the Board's opinion suggests, but also includes a prominent anchoring leg to secure the device to the ground. The anchoring leg, which runs the length of the Wilson device, would inhibit longitudinal flexibility of the Wilson device. Indeed, Wilson expressly contemplates flexibility and conformability *only* in the mower strip. Wilson states that its mower strip may be lifted in order to pack dirt thereunder for the purpose of securing the device to the ground. Fritch, on the other hand, is claimed to be flexible in its entirety.

<sup>1</sup> *In re De Blauwe*, 736 F.2d 699, 703, 222 USPQ 191, 195 (Fed. Cir. 1984).

<sup>2</sup> *In re Kulling*, 897 F.2d 1147, 1149, 14 USPQ2d 1056, 1057 (Fed. Cir. 1990).

<sup>3</sup> *In re De Blauwe*, 736 F.2d at 703, 222 USPQ at 195.

<sup>4</sup> *Beckman Instruments Inc. v. LKB Products AB*, 892 F.2d 1547, 1551, 13 USPQ2d

The Board's holding that Wilson is flexible in its entirety is based upon a misapprehension of the scope of Wilson's teachings.

Second, Wilson's anchoring leg prohibits conformability to the ground surface in the manner claimed by Fritch. The Examiner's description of Wilson as having a "planar bottom surface conformable to a varying slope surface" is applicable *only* in reference to the mower strip. This description, however, ignores the anchor leg and the fact that it must be placed *into* the ground. Wilson expressly teaches that the anchoring leg may be pushed into soft soils, but in harder terrain a trench is needed in order to place the Wilson sprinkler system. In order to install the Wilson apparatus, the ground surface must be altered to conform to the device rather than, as the Solicitor contends, that Wilson is freely conformable to the ground. Fritch, on the other hand, does not require such extensive alteration of the ground surface in order to install the device.

## Prima Facie Obviousness

In proceedings before the Patent and Trademark Office, the Examiner bears the burden of establishing a prima facie case of obviousness based upon the prior art.<sup>6</sup> "[The Examiner] can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references."<sup>7</sup> The patent applicant may then attack the Examiner's prima facie determination as improperly made out, or the applicant may present objective evidence tending to support a conclusion of nonobviousness.<sup>8</sup>

Fritch has attacked the Board's finding that the Examiner established that Fritch's claimed invention was prima facie obvious in view of the teachings of the prior art. The Board states that "a collective evaluation of the Wilson and the Hendrix patents would have rendered the subject matter of independent claims 1, 13, 24, and 29 obvious to one of ordinary skill." Fritch maintains that there is no teaching, suggestion, or incentive in the prior art to modify or to combine the

teachings of the prior art in the manner suggested by the Examiner. We agree.

[3] Wilson teaches a grass edging and watering device which includes an anchoring leg for securing the device to the ground. Wilson contemplates that a trench will need to be dug in order to allow the anchoring leg to be placed into the ground if the condition of the soil requires it. This anchoring leg prohibits flexibility and conformability over the length of Wilson. Any flexibility or conformability in Wilson, which the Board states extends to the entire device, is limited to the mower strip. It is only the mower strip that is mentioned as being flexible in order to aid installation. Hendrix has been cited for its teaching of a flexible retainer strip that is able to conform to the ground surface.

Wilson addresses the problems of arresting growth of grass between areas and watering plants without wetting sidewalks. Wilson lacks any suggestion or incentive to use its water conduit as a landscape retainer since this would arguably result in clogged sprinkler heads.<sup>9</sup> Wilson also teaches that its mower strip is flexible in order to allow dirt to be packed thereunder. There is no suggestion in Wilson to extend that flexibility to the entire device. Wilson also lacks any teaching or suggestion that one should remove the anchoring leg. Hendrix does not, simply by virtue of its flexible nature, suggest these extensive changes which the Board states are obvious. Neither Wilson nor Hendrix, alone or in combination, provide any incentive to combine the teachings of the prior art in the manner maintained by the Board.

[4] "Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under section 103, teachings of references can be combined *only* if there is some suggestion or incentive to do so."<sup>10</sup> Although couched in terms of combining teachings found in the prior art, the same inquiry must be carried out in the context of a purported obvious "modification" of the prior art. The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested

<sup>12</sup> This court has previously found a proposed modification inappropriate for an obviousness inquiry when the modification rendered the prior art reference inoperative for its intended purpose. *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984).

<sup>13</sup> *ACS Hosp. Systems, Inc. v. Montefiore Hosp.*, 732 F.2d 1577, 1579, 21 USPQ2d 1000, 1002.

<sup>9</sup> *In re Piasecki*, 745 F.2d 1468, 1471-72, 223 USPQ 785, 787-88 (Fed. Cir. 1984).

<sup>10</sup> *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988) (citing *In re Lali*, 747 F.2d 703, 705, 223 USPQ 1257, 1258 (Fed. Cir. 1988)).

<sup>11</sup> *In re Heldt*, 433 F.2d 808, 811, 167 USPQ



## TRADEMARKS AND UNFAIR TRADE PRACTICES

## 1. Acquisition, assignment, and maintenance of marks — Acquisition through use — Priority of use (§305.0503)

Practice and procedure in Patent and Trademark Office — Interpartes proceedings — Opposition and cancellation — In general (§325.0305.01)

Infringement; conflicts between marks — Likelihood of confusion — In general (§335.0301)

Opposer which uses mark "Rescue 911" for its television show, which asserts that it has licensed use of mark on various merchandise items, and which seeks to oppose registration of "911 Rescue Bars," for candy bars, must clearly indicate in its pleading whether its claim of likelihood of confusion is based upon its services or its collateral merchandise, or both, and whether it claims priority of use of its mark on its collateral merchandise.

Consolidated trademark oppositions, no. 85,324 and 85,330, by CBS Inc. against James V. Mercandante and Rose Marie Mercandante, d/b/a 911 Rescue Bar, applications serial no. 74/076,762, filed July 9, 1990, and 74/081,873, filed July 25, 1990, in which applicants counterclaim to cancel opposer's pleaded registration. On opposer's motion to amend its answer to counterclaim, and on applicant's motions to strike opposer's affirmative defenses, and for judgment on the pleadings. Motion for judgment on pleadings granted in part.

David S. Fishman, Windsor, Conn., for applicants.

Marshall J. Nelson, Washington, D.C., for opposer.

Before Sams, Rice, and Quinn, members.

By the board.

James V. Mercandante and Rose Marie Mercandante filed applications to register

and criteria fail to suggest any motivation for, or desirability of, the changes espoused by the Examiner and endorsed by the Board.

Here, the Examiner relied upon hindsight to arrive at the determination of obviousness. It is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious.<sup>15</sup> This court has previously stated that "[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention."<sup>16</sup>

### Conclusion

The decision of the Board affirming the Examiner's rejection of independent claims 1, 13, 24, and 29 of Fritch's application as unpatentable over the prior art under 35 U.S.C. § 103 is reversed. Since dependent claims are nonobvious if the independent claims from which they depend are nonobvious, the Board's affirmation of the rejection of dependent claims 2-7, 9-12, 14-23, and 30 is also reversed.<sup>17</sup>

REVERSED

### U.S. Patent and Trademark Office Trademark Trial and Appeal Board

CBS Inc. v. Mercandante

Nos. 85,324 and 85,330

Decided June 15, 1992

<sup>14</sup> *In re Gordon*, 733 F.2d at 902, 221 USPQ at 1127.

<sup>15</sup> *In re Gorman*, 933 F.2d 982, 987, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991). See also *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1138, 227 USPQ 543, 547 (Fed. Cir. 1985).

<sup>16</sup> *In re Fine*, 837 F.2d at 1075, 5 USPQ2d at 1600.

<sup>17</sup> *In re Fine*, 837 F.2d at 1076, 5 USPQ2d at 1600 (citing *Hartness Int'l, Inc. v. Simplimatic Eng'g Co.*, 819 F.2d 1100, 1108, 2 USPQ2d 1826, 1831 (Fed. Cir. 1987)). See also *In re Sernaker*, 702 F.2d 989, 991, 217 USPQ 1, 3 (Fed. Cir. 1983) (when argued together, dependent claims stand or fall with the independent claims from which they depend).

Further, the prospect of dismissal of the PTO opposition was not properly before the district court because AEF raised the issue for the first time in its motion for reconsideration. AEF failed to raise the argument as a counterclaim to the infringement action. Hence, according to the procedural posture of the case and by AEF's own admissions, its argument for dismissal is not based on the merits but on an estoppel theory. As the district court correctly pointed out, estoppel issues are ordinarily enforced by awaiting a second action, in which they are pleaded and proved by the party asserting estoppel. The PTO, not the district court, must determine the preclusive effect of EL's statements.

Even if the issue of estoppel was properly before the district court, however, in light of the PTO's expertise and the district court's failure to reach the merits of the underlying action in this case, the district court's decision was reasonable and not an abuse of discretion.

**III. CONCLUSION**

The district court adequately articulated its reasons for denying attorney's fees and costs, applied the correct legal standard for "exceptional" cases under 15 U.S.C. § 1117(a), and in its discretion denied AEF's request for attorney's fees. The district court also did not abuse its discretion by refusing to dismiss the pending trademark opposition.

Accordingly, the district court's decision is **AFFIRMED.**

**Ruiz v. A.B. Chance Co.**  
**U.S. Court of Appeals**  
**Federal Circuit**  
No. 03-1333  
Decided January 29, 2004

**PATENTS**

**[1] Patentability/Validity — Obviousness — Combining references (§ 115.0905)**

Obviousness analysis requires court to assess invention as whole to determine whether there was suggestion or motivation to combine prior art references, without engaging in improper "hindsight" determination; but finding of obviousness does not require existence of express, written motivation to combine

dant on nonpatent claims, and at trial found that patents were infringed, but that patent claims at issue were invalid for obviousness. Judgment of invalidity was vacated and remanded (57 USPQ2d 1161). On remand, district court again found claims invalid as obvious, and defendant appealed. Affirmed.

Prior decision: 57 USPQ2d 1161.

Matthew A. Rosenberg, of Blumenfeld, Kaplan & Sandweiss, St. Louis, Mo., for plaintiffs-appellees.

John H. Quinn III and Andrew B. Mayfield, of Armstrong Teasdale, St. Louis, for defendant-appellant.

Before Newman, Michel, and Rader, circuit judges.

**Rader, J.**

On remand from this court's decision in *Ruiz v. A.B. Chance Company*, 234 F.3d 1344 [57 USPQ2d 1161] (Fed. Cir. 2000), the United States District Court for the Eastern District of Missouri found defendant-appellant A.B. Chance Company's (Chance) patented underpinning system obvious under 35 U.S.C. § 103. Because the district court made no clear error in its factual determinations concerning the motivation to combine the prior art teachings and the merit of Chance's asserted secondary considerations, this court affirms.

I.

Since about 1970, Chance has manufactured screw anchors, also called helical piers, for use in supporting and stabilizing electrical transmission towers. Screw anchors are elongated shafts with an earth-boring (screw) tip and a transversely extending load-bearing member. In 1988, Chance extended its expertise in stabilizing slumping structures into the residential and commercial building markets. Chance used screw anchors with a metal bracket to underpin these building foundations. The Chance underpinning method places the screw anchor adjacent to the footing and rotates the screw anchor to bore beneath the footing. When resistance to rotation of the screw anchor reaches a specified point, Chance attaches a metal bracket (designated as 30 in the Figure below) to the slouching foundation to transfer the building load on the screw anchor. The United States Patent and Trademark Office issued U.S. Patent Nos. 5,139,368 and 5,171,107 to Chance in 1991 covering this screw anchor system. Figure 5 the '107 patent shows the technology:

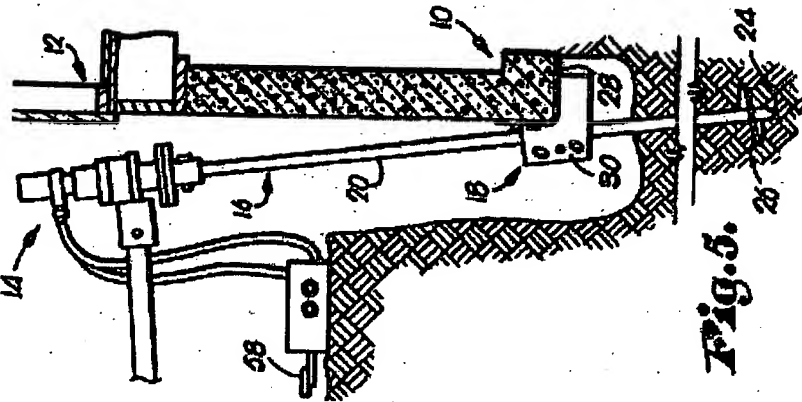


Fig. 5.

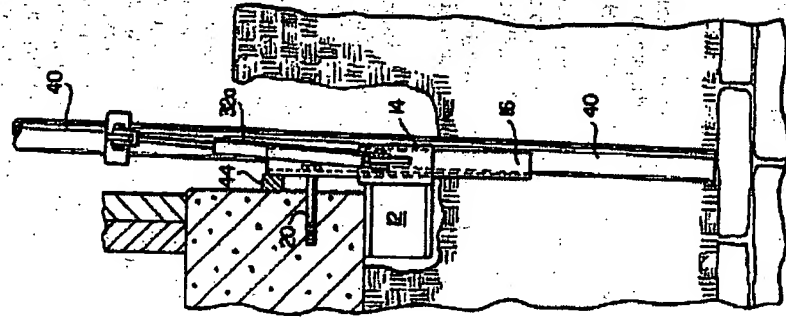


FIG. 6

The scope of the claims in this case is not at issue in this appeal, because the parties agree that the claims are infringed or invalid by the use of a screw anchor in conjunction with a metal bracket to underpin a foundation. Additional information concerning the claims and the other aspects of this case appear in this court's opinion in *Ruiz v. A. B. Chance Co.*, 234 F.3d 654 [57 USPQ2d 1161] (Fed. Cir. 2000). Examination of the prior art

shows that the Fuller-Rupiper method discloses the screw anchor component of the claims; the Gregory system discloses the metal bracket component in the claims. Thus, this appeal is properly focused on the motivation to combine those teachings, as well as any secondary considerations that might inform the obviousness analysis.

The district court granted summary judgment in favor of Chance on all of Ruiz's non-patent claims in April 1999. On the patent claims, the district court held a *Markman* hearing to construe the claims and a bench trial to decide the issues of infringement and validity. At the time of trial, the scope of the case had narrowed to focus on claims 1-4 and 6-8 of the '368 patent and claims 1-4 and 6-8 of the '107 patent. After the trial, the district court entered its judgment from the bench that Ruiz's product infringes the patent claims to the tune of \$540,000 in damages. Nonetheless, the trial court determined that the claims are invalid under 35 U.S.C. § 103 in light of the Gregory patents and the Fuller-Rupiper method.

This court heard the appeal from that judgment and affirmed every holding of the district court except the finding of obviousness. In *Ruiz*, 234 F.3d at 660, this court remanded the case to the district court for further examination of obviousness. This court issued the following instructions:

On remand, we instruct the district court to make specific *Graham* findings on: 1) the reason, suggestion, or motivation present in the prior art, in the knowledge of one of skill in the art, or in the problem of foundation settling which clearly and particularly would lead one of ordinary skill in the art to combine screw anchors with metal brackets; 2) the level of ordinary skill in the art; and 3) whether, and to what extent, evidence of secondary consideration, such as commercial success, long felt but unresolved need, failure of others, copying, and unexpected results, is probative in the obviousness analysis.

The district court invited additional briefing and oral argument on the remand issues. Having reconsidered the evidence of the case, the district court again found the relevant claims invalid as obvious and issued an opinion outlining its factual findings according to this court's instructions. Of particular significance, the district court found the motivation to combine the teachings of the Gregory patents and

the Fuller-Rupiper method in the nature of the problem of underpinning foundations itself, explaining:

The Rupiper method and the Gregory patent can be combined in either of two ways to reach the same result as the method covered by the patents in issue here: by replacing the concrete haunch of the Rupiper method with the bracket of the Gregory patent, or by replacing the straight piling of the Gregory patent with the screw anchor of the Rupiper method. The evidence in this case showed that there was reason, suggestion or motivation to make these combinations. . . . The problem is the same: how to underpin an unstable foundation of an existing building.

The district court also discounted Chance's proffered objective evidence of commercial success and skepticism of experts as weak. Specifically, the district court found that the alleged skepticism of Chance's system the Rupiper was merely an acknowledgement of the Rupiper's concrete haunch worked better than a metal bracket in seismic areas, such as California. The record indeed does not show that Rupiper doubted that Chance's system would work in general. In addition, the district court attributed Chance's commercial success to its background and experience in screw anchors rather than any inventive features of the screw anchor-metal bracket system as a whole.

Chance now appeals again, arguing that the district court, as it did in its original judgment, employed hindsight to find obviousness. Specifically, this appeal involves two challenges to the district court's obviousness determination: 1) whether the district court clearly erred in finding an implied motivation to combine the prior art teachings in the nature of the problem of underpinning existing foundations, and 2) whether the district court clearly erred in discounting Chance's evidence of secondary considerations. Jurisdiction over this appeal is proper under 28 U.S.C. § 1295.

## II.

Section 103 of title 35 of the United States Code states:

A patent may not be obtained . . . if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

35 U.S.C. § 103(a) (2000).

In making the assessment of differences, section 103 specifically requires consideration of the claimed invention "as a whole." Inventions typically are new combinations of existing principles or features. *Envtl. Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 698 [218 USPQ 865] (Fed. Cir. 1983) (noting that "virtually all [inventions] are combinations of old elements."). The "as a whole" instruction in title 35 prevents evaluation of the invention part by part. Without this important requirement, an obviousness assessment might break an invention into its component parts (A + B + C), then find a prior art reference containing A, another containing B, and another containing C, and on that basis alone declare the invention obvious. This form of hindsight reasoning, using the invention as a roadmap to find its prior art components, would discount the value of combining various existing features or principles in a new way to achieve a new result — often the very definition of invention.

Section 103 precludes this hindsight discounting of the value of new combinations by requiring assessment of the invention as a whole. This court has provided further assurance of an "as a whole" assessment of the invention under § 103 by requiring a showing that an artisan of ordinary skill in the art at the time of invention, confronted by the same problems as the inventor and with no knowledge of the claimed invention, would select the various elements from the prior art and combine them in the claimed manner. In other words, the examiner or court must show some suggestion or motivation, before the invention is made, to make the new combination. *See In re Rouffet*, 149 F.3d 1350, 1355-56 [47 USPQ2d 1453] (Fed. Cir. 1998).

While the ultimate determination of obviousness is a legal conclusion reviewed by this court without deference, that determination always entails various factual findings that this court reviews for clear error following a bench trial. *See Weatherchem Corp. v. J.L. Clark, Inc.*, 163 F.3d 1326, 1332 [49 USPQ2d 1001] (Fed. Cir. 1998). The clear error standard permits reversal only when this court is left with a "definite and firm conviction" that the district court was in error. *Ambil Enters. Ltd. v. Wawa, Inc.*, 81 F.3d 1554, 1562 [38 USPQ2d 1471] (Fed. Cir. 1996).

This case deals with a challenge to the district court's conclusion on two of the underlying factual determinations in its obviousness analysis. Accordingly, this court will review

for clear error the district court's conclusions regarding objective, secondary considerations. *See Pro-Mold v. Great Lakes Plastics*, 75 F.3d 1568, 1572 [37 USPQ2d 1626] (Fed. Cir. 1996), and whether a motivation to combine the teachings in the prior art references was shown. *See Winner Int'l Royalty, Corp. v. Wang*, 202 F.3d 1340, 1348 [53 USPQ2d 1580] (Fed. Cir. 2000).

The district court in this case presided over a bench trial and reconsidered the evidence on remand. Chance's principal argument is that the district court clearly erred in finding a motivation to combine the teachings in the Gregory patents with the Fuller-Rupiper method. Chance cites this court's precedent that warns district courts about the risk of hindsight reconstruction to find an invention obvious where the invention at issue involves relatively simple technology. *See McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351 [60 USPQ2d 1001] (Fed. Cir. 2001). Accordingly, Chance argues that the district court utilized hindsight to find that a person of ordinary skill would have been motivated to combine their prior art teachings.

[1] To the contrary, the record in this case supports the trial court's findings. While the court indeed warns against employing hindsight, its counsel is just that — a warning. Hindsight does not provide a rule of law that any express, written motivation to combine must appear in prior art references before a finding of obviousness. Stated differently, this court has consistently stated that a court or examiner may find a motivation to combine prior art references in the nature of the problem to be solved. *See Pro-Mold*, 75 F.3d at 1573; *Display Techs., Inc. v. Paul Flum Ideas, Inc.*, 282 F.3d 1340, 1346-47 (Fed. Cir. 2002). *In re Huang*, 100 F.3d 135, 139 n.5 [40 USPQ2d 1685] (Fed. Cir. 1996). This form of motivation to combine evidence is particularly relevant with simpler mechanical technologies.

[2] This record shows that the district court did not use hindsight in its obviousness analysis, but properly found a motivation to combine because the two references address precisely the same problem of underpinning existing structural foundations. Moreover, the record supports the district court's factual finding that Fuller's and Rupiper's work showed that screw anchors worked better than straight push pins. In fact, the evidence shows that Rupiper introduced Chance to the use of screw anchors in underpinning buildings, foundations. Chance then added a metal bracket to the screw anchor.

The record also supports the district court's conclusion that artisans knew that a foundation underpinning system requires a means of connecting the foundation to the load-bearing member. The Gregory patents teach the use of a metal bracket to connect a foundation to a straight pier, and testimony at trial showed that the need for a connecting element was widely known. Thus, the district court could properly conclude on this record, without being clearly in error, that a person of ordinary skill would be led to combine the screw anchor in the Fuller-Rupiper method with the metal bracket in the Gregory system to underpin an existing building foundation.

This record, it is true, does not feature an express written teaching in the art to make this combination. On this record, however, that is not fatal to the district court's obviousness determination. As noted earlier, this court has repeatedly stated that the motivation to combine the teachings in the prior art may "come from the nature of a problem to be solved, leading inventors to look to references relating to possible solutions to that problem." *Pro-Mold*, 75 F.3d at 1573. The district court in this case applied that settled law. The district court, sitting as a finder of fact, weighed the evidence and found that, because the prior art references address the narrow problem of underpinning existing building foundations, a person seeking to solve that exact same problem would consult the references and apply their teachings together. Thus the district court's conclusion is perfectly legitimate when the evidence supports it, as it does here.

Chance's argument amounts to little more than its own alternative view of the evidence. While the record does contain some evidence against the district court's finding, such evidence is not overwhelming by any means. In addition, the district court in this case did not simply discount all contrary evidence and bolster a meager amount of evidence to reach a preformed conclusion. In fact, the district court discounted and discredited some testimony that actually supported its ultimate conclusion. For instance, the trial court dismissed the testimony of Robert Jones, a Chance distributor, that he would have made the combination. The district court declined to credit Mr. Jones' testimony because he exhibited far more than an ordinary level of skill in this art. The trial court's careful consideration of Mr. Jones' evidence shows further that it performed a detailed and reasoned analysis of the evidence, rather than a conclusion-oriented discussion that typically accompanies a hind-

sight analysis. In short, the record in this case does not approach the evidence necessary to leave this court with a firm conviction that the district court committed clear error in its factual finding of a motivation to combine the Fuller-Rupiper and Gregory teachings.

Finally, the record also supports the district court's discounting of Chance's evidence of secondary considerations. The record supports the trial court's finding that any commercial success was not due to Chance's alleged unique combination, but rather due to Chance's experience with screw anchors combined with being the first large screw anchor manufacturer to enter the underpinning market. The district court did not clearly err in reaching this conclusion, nor in concluding that the evidence of skepticism was weak.

### III.

Based on the above analysis, this court holds that the district court did not clearly err in finding a motivation to combine the prior art references in the nature of the problem at issue. In addition, this court holds that the district court did not clearly err in discounting Chance's evidence of secondary considerations. Accordingly, this court affirms the judgment of the district court.

### COSTS

Each party shall bear its own costs.

### AFFIRMED

**Motorvac Technologies Inc. v. Norco Industries Inc.**

**U.S. District Court**

**Central District of California**

**No. SACV 02-503 DOC (ANx)**

**Decided January 12, 2004**

### PATENTS

**[1] Infringement — Defenses — Estoppel; laches (§ 120.1103)**

Accused infringer moving for summary judgment that infringement claim is barred by laches has not provided affirmative evidence that patentee's delay of three and one-half years in filing suit was unreasonable, since such delay is not excessive on its face, and since, in undertaking reexamination of its